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(54) **LASER BEAM WELDING METHOD**

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(57) Abstract:

PURPOSE: To simplify the structure of equipment when at least either of preheating and postheating is carried out by using a laser beam for welding and to reduce the cost.

CONSTITUTION: A rack 8 extended along an optical axis of the laser beam is fixed on the side of a welding torch 4 of a laser beam head 1, a gear 11 driven by a driving motor unit 9 is meshed with the rack 8 and the gear 11 is rotated forward and backward, by which the welding torch 4 is made displaceable in the optical axis direction. The position of a focus of the laser beam 7 is located above and a weld zone can be irradiated with the laser beam in the wide range by keeping the welding torch 4 at a specified distance above the weld zone of strips 2 and 3 at the time of preheating and postheating. Consequently, the need to provide a driving mechanism to scan the laser beam is eliminated and the cost of the laser beam welding equipment capable of carrying out preheating and postheating can be reduced by the simple structure.

